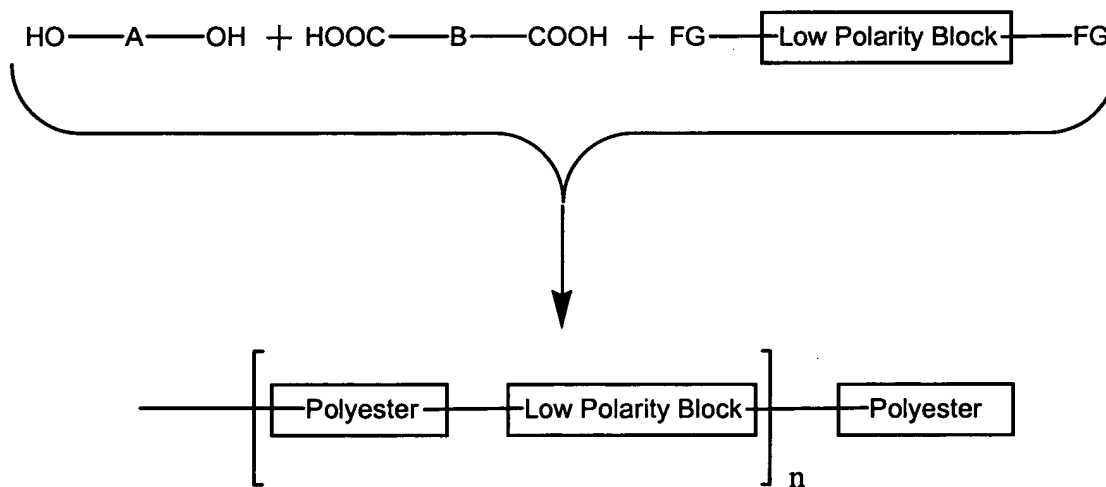


Favorable reconsideration in light of the amendments and remarks which follow is respectfully requested.

A brief description of the present invention may be of assistance in addressing the 102/103 rejections presented in the outstanding office action.

As provided by claim 50, the present invention provides adhesive or coating copolyester compositions having substantial adhesion, e.g., improved adhesion, where the composition comprises the reaction product of at least one difunctional alcohol, at least one dicarboxylic acid, and at least one low polarity telechelic oligomeric block material.

As is well known in the art, a difunctional alcohol and a dicarboxylic acid react to form a polyester through a dehydration-esterification process. Telechelic low polarity oligomeric blocks have functional groups suitable for coupling with either a carboxylate residue or an alcohol at the termini of the main chain of the oligomer such that the low polarity block may be imbued into the growing main chain of the polyester to form a block copolymer structure which may be represented by the generic structure:



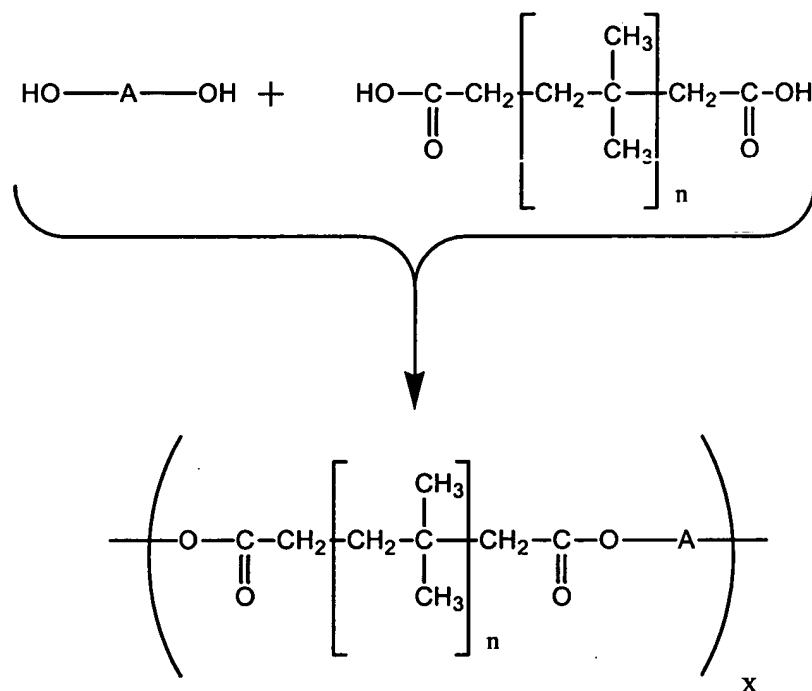
wherein n is a positive integer and FG is a functional group capable of coupling to a hydroxyl or carboxylic acid residue.

Thus, the adhesive or coating copolyester composition of the present invention comprise a main chain having **polyester** block domains and **low polarity** block domains where the polymer is formed by the copolymerization of three components: a dicarboxylic acid, a diol, **and** a telechelic low polarity block with functional groups capable of coupling to a hydroxyl or carboxylic acid residue.

As provided by claim 50 and by the specification, telechelic low polarity blocks suitable for use in the compositions of the present invention include: (1) saturated and unsaturated telechelic polyolefins having a weight average molecular weight of between about 500 and 4500, (2) ABA block copolymers where B is an alkyl and/or aromatic substituted polysiloxane, and where A is a functionally terminated polyalkyleneoxide, (3) telechelic fluoropolymers. See, for example, page 6, line 22 to page 7, line 14.

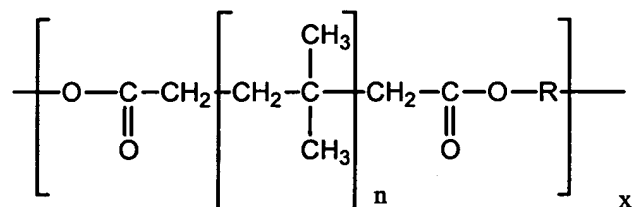
Claims 1-13, 17-22, 37-47, 50-53 and 60-64 have been rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Peters '158.

As the reference is understood, Peters teaches the copolymerization of two components to form a polymeric material. That is, Peters teaches the copolymerization of an equal molar proportion of a diol and a polymeric dicarboxylic acid according to Formula III. The reaction to form a polyester-polyisobutylene block copolymer recited by Peters can be represented by the following scheme:



Thus Peters does not teach any copolyesters. More particularly, Peters neither discloses nor suggests copolyesters composed of a diol monomer, a dicarboxylic acid monomer **and** a telechelic low polarity oligomeric or polymeric monomer.

Peters appears to teach polyesters in which the diacid monomer is a carboxylate terminated polyisobutylene oligomer. Thus the polyesters taught by Peters comprise alternating (cyclo)alkylene diol and polyisobutylene groups linked by ester bonds, i.e., Peters teaches polymers of the general formula:



where n is an integer suitable for making the polyisobutylene block have a Mw of between 5,000 and 30,000 and R is a linear alkylene or a cycloalkylene diradical.

In other words, Peters provides a polyester composed of a diol (HO-R-OH) and a diacid where the diacid is a carboxylic acid terminated polyisobutylene according to Formula III. More particularly, Peters appears to teach polyisobutylene blocks linked to an aliphatic or cycloaliphatic diol through two ester bonds. Thus, Peters neither discloses nor suggests block copolymers having polyester blocks and polyolefin blocks.

Peters neither teaches nor discloses the polyester resins of the present invention. That is, Peters neither teaches nor discloses resins having polyester resins having both polyester blocks and low polarity blocks present in the resin. Moreover, Peters does not teach polyester resins having at least one low polarity polymeric block is selected from the group of: saturated and unsaturated telechelic polyolefins, fluorine substituted telechelic oligomers and polymers, functionally terminated ABA block copolymers of polyalkyleneoxide (A) and alkyl and aromatic substituted polysiloxanes (B), and blends thereof.

Thus claims 1, 37 and 50 are patentable over Peters. Claims 2-13, 17-23, 27-29, 34-36, 38-47, 51-55 and 59-63 are dependent from one of claims 1, 37, or 50 and are therefore also patentable over Peters.

Reconsideration and allowance of claims 1-13, 17-23, 27-29, 34-47, 50-55 and 59-63 is respectfully requested in view of the foregoing discussion. This case is believed to be in condition for immediate allowance. Applicant respectfully requests early consideration and allowance of the subject application.

Claims 37-47 have been rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Lin.

Claims 37-47 have been rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Policastro.

Claims 37-47 have been rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over each of Hallgren and Eichenauer.

The language of claim 23 has been incorporated into claim 37. None of the references cited by the Examiner, i.e., Lin, Policastro, Hallgren, Eichenauer, taken alone or in combination teach or suggest methods of improving adhesion of a method of improving the adhesion of copolyesters to polymeric or cellulosic substrates, comprising:

incorporating a low polarity telechelic oligomeric block segment in the copolyester polymer chain, wherein

the copolyester polymer is prepared from at least one difunctional alcohol and at least one dicarboxylic acid; and

the low polarity telechelic oligomeric block segment is selected from the group of: saturated and unsaturated telechelic polyolefins, fluorine substituted telechelic oligomers and polymers, functionally terminated ABA block copolymers of polyalkyleneoxide (A) and alkyl and aromatic substituted polysiloxanes (B), and blends thereof.

Thus, claim 37 as amended are also patentable over Lin, Policastro, Hallgren, Eichenauer, or any combination thereof. Claims 35-42 and 45-46 depend from claim 37 and are therefore also patentable over Lin, Policastro, Hallgren, Eichenauer, or any combination thereof.


New claims 64 through 66 depend from claim 1 or claim 50 and are therefore also patentable over any combination of the documents cited by the Examiner.

If for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge Deposit Account No. 04-1105.

Should the Examiner wish to discuss any of the amendments and/or remarks made herein, the undersigned attorney would appreciate the opportunity to do so.

Respectfully submitted,

Date: March 21, 2003



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VERSION WITH MARKINGS TO SHOW CHANGES MADE IN CLAIMS

Please note that additions to the claims are shown underlined and deletions are shown in brackets.

IN THE CLAIMS:

Kindly cancel claims 43 and 44 without prejudice or disclaimer.

Please amend claim 37, as follows:

37. (amended) A method of improving the adhesion of copolyesters to polymeric or cellulosic substrates, comprising:

incorporating a low polarity telechelic oligomeric block segment in the copolyester polymer chain wherein

the copolyester polymer is prepared from at least one difunctional alcohol and at least one dicarboxylic acid; and

the low polarity telechelic oligomeric block segment is selected from the group of: saturated and unsaturated telechelic polyolefins, fluorine substituted telechelic oligomers and polymers, functionally terminated ABA block copolymers of polyalkyleneoxide (A) and alkyl and aromatic substituted polysiloxanes (B), and blends thereof.

Please enter new claims 64 through 66, as follows:

64. (new) The method of claim 1, wherein the substantial adhesion is aged adhesion to a high surface energy substrate.

65. (new) The method of claim 64, wherein the high energy substrate comprises at least one material selected from untreated polyethyleneterephthalate, polyethylenenaphthalate, untreated oriented polypropylene, polyvinyl fluoride, nylon, polyimide, polycarbonate, polystyrene, polymethyl methacrylate, polyvinylidene fluoride, polyurethanes, and cellulotics.

66. (new) The adhesive or coating of claim 50, wherein the composition has substantial retained adhesion to substrates comprising at least one material selected from untreated polyethyleneterephthalate, polyethylenenaphthalate, untreated oriented polypropylene, polyvinyl fluoride, nylon, polyimide, polycarbonate, polystyrene, polymethyl methacrylate, polyvinylidene fluoride, polyurethanes, and cellulose.